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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,423	08/02/2001	Randhir P.S. Thakur	3978.1US (95-0064.1)	8029

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EXAMINER

MONDT, JOHANNES P

ART UNIT PAPER NUMBER

2826

DATE MAILED: 09/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/921,423

Applicant(s)

THAKUR ET AL.

Examiner

Johannes P Mondt

Art Unit

2826

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 August 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ they raise the issue of new matter (see Note below);
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-13.

Claim(s) withdrawn from consideration: _____

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

Continuation of 5. does NOT place the application in condition for allowance because: Applicant's traverse of the rejection, based on traverse of the obviousness argument, is not persuasive. The additional references for claim 1, i.e., Wolf and Haller only serve to teach the material selection of the first non-conductive oxide and second non-conductive oxide in the primary reference (Hsia et al, 5,827,783). It is already clear from the primary reference that necessary and sufficient requirements for the two materials are (a) that they must be non-conductive oxides, (b) that they must have standard use as dielectric in capacitors and that they must have substantially different etch rates. Wolf recites the plurality of reasons for the selection of BPSG (a non-conductive oxide) as a preferred dielectric in capacitors as enumerated in the Final Rejection (ease of deposition at relatively low temperature, reduced stress, relatively low glass flow temperatures), while, as detailed in the Final Rejection, Haller specifically teaches (see inter alia Figures 2 and 3 giving the etch rate as a function of etch rate and germanium concentration) the exploitation of the strong dependence on germanium concentration of the etch rate of germanium-BPSG in the field of semiconductor integrated circuits, particularly patterned layers or regions of conductive and non-conductive materials in semiconductor integrated circuits, of which storage capacitors form a good example; therefore, Haller makes it clear that BPSG and Ge-BPSG also satisfy the third criterion, and hence the preference of BPSG and Ge-BPSG is not at all adversely affected by said third criterion.